Filing Date: February 28, 2002

Title: COCKPIT INSTRUMENT PANEL SYSTEMS AND METHODS WITH REDUNDANT FLIGHT DATA DISPLAY

#### **REMARKS**

Attorney Dkt. 702.144

Applicant has carefully reviewed and considered the Office Action mailed on March 7, 2003, and the references cited therewith.

Claims 1, 7, 14-16, and 21 are amended, claims 3 and 8 are cancelled; as a result, claims 1-2, 4-7, and 9-28 are now pending in this application.

# §112 Rejection of the Claims

Claim 14 was rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claim 14 has been amended, per the Examiner's suggestion to accord proper dependency to claim 7.

# §102 Rejection of the Claims

Claims 1, 2, 4, 6-8, and 14 were rejected under 35 USC § 102(b) as being anticipated by Bollard, et al. (U.S. Patent No. US004845495A).

Applicant's independent claim 1, as amended, recites a reversionary display to automatically provide a backup presentation of a set of important flight information data, including communication, navigation, and equipment sensor functions, upon the failure of one or more primary instrument displays. This is supported by the Applicant's specification at page 24, line 2.

Bollard appears to describe set of redundant pair, mission computer. Bollard illustrates separate devices for communications, navigation, and equipment sensors. However, Bollard does not describe a single reversionary display to provide a backup presentation of communication, navigation, and equipment sensor settings. Nor does Bollard recite automatically providing such a backup presentation on a reversionary display should one or more of the devices of the redundant pair go down.

Applicant submits that Bollard does not include each and every limitation of Applicant's amended independent claim 1. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the Bollard 102 rejection for claim 1, as well as those claims which depend therefrom.

Applicant's independent claim 7, as amended, recites a first and a second reversionary display. As defined in the Applicant's specification on page 20, lines 27-28, "the reversionary mode illustrated on MFD 300 provides a display format which is as similar as possible to the normal flight data display across one or more MFDs." Applicant submits that this definition for reversionary is different from the later citation to Woodgate. Woodgate appears to refers to reversionary in the context of switching between an autostereoscopic display and a two dimensional display. Applicant's independent claim 7, as amended further recites that important flight information data can be provided to either a first or a second cockpit instrument panel, "in a substantially similar format size, location, and perspective when one of the first or the second cockpit instrument panels fail, in a backup mode."

Bollard is silent as to the format size, location, and perspective of important flight information data when one or more of the separate devices of the redundant pair, mission computer fail.

Applicant submits that Bollard does not include each and every limitation of Applicant's amended independent claim 7. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the Bollard 102 rejection for claim 7, as well as those claims which depend therefrom.

Claims 1, 2, 4-14, 21-28 were rejected under 35 USC § 102(b) as being anticipated by the Honeywell Primus Epic (Epic) avionics system, Al Ditter, An Epic in the Making, Computer World, December 1996-January 1997, pages 16, 18-21; William B. Scott, Pentium Powers 'Epic' Integrated Avionics, Aviations Week & Space Technology, November 18, 1996, pages 67-69; James Holahan, LCD's, Mice on the Flight Deck!, Aviation International News, November 1, 1996, pages 56-58; Fred George, Introducing Primus Epic, Business & Commercial Aviation, November 1996, pages 116, and 118-120.

The references cited against the above claims suffer from the same deficiencies addressed for claims 1 and 7 in view of Bollard. Claim 21, as amended, includes recites "reversionary displays" as defined by the Applicant's specification and addresses "automatically replacing a content of a functional multifunction display with the set of flight information data, including communication, navigation, and equipment sensor functions, upon the failure of one or more primary instrument displays." Each and every element of Applicant's independent claim 21, as amended, is not shown in the collection of references cited above.

AMENDMENT AND RESPONSE UNDER C.F.R. § 1.111

Serial Number: 10/086,783

Filing Date: February 28, 2002

Title: COCKPIT INSTRUMENT PANEL SYSTEMS AND METHODS WITH REDUNDANT FLIGHT DATA DISPLAY

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 102 rejection for independent claims 1, 7 and 21, as well as those claims which depend therefrom.

Page 10

Attorney Dkt. 702,144

## §103 Rejection of the Claims

Claims 3, 15, 17, and 19 were rejected under 35 USC § 103(a) as being unpatentable over Bollard (US004845495) in view of Woodgate, et al. (US005917562A).

Claims 3 and 15-20 were rejected under 35 USC § 103(a) as being unpatentable over the Epic System in view of Woodgate, et al. (US005917562A).

Claim 3 is cancelled. The reversionary language as defined by the Applicant's specification has been incorporated into allowable independent claim 1.

Applicant's independent claim 15, as amended, recites a PFD and a MFD having reversionary capabilities according to the meaning provided in the Applicant's specification. Amended claim 15 recites that both the PFD and MFD are adapted to display full flight information data in an identical format and size, in a reversionary mode, automatically if either the PFD or MFD in inoperable.

None of the cited references, either independently or in combination, teach or suggest providing full flight data in an identical format and size, in a reversionary mode (as defined by the Applicant's specification), automatically if either the PFD or MFD becomes inoperable.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the 103 rejection for independent claims 15, as well as those claims which depend therefrom.

Page 11 Attorney Dkt. 702.144

Serial Number: 10/086,783

Filing Date: February 28, 2002
The: COCKPIT INSTRUMENT PANEL SYSTEMS AND METHODS WITH REDUNDANT FLIGHT DATA DISPLAY

## **CONCLUSION**

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 659-9340 to facilitate prosecution of this matter.

If necessary, please charge any additional fees or credit overpayment to the Deposit Account No. 501-791. Additionally, please direct all future correspondence regarding this case to: GARMIN International, Inc. 1200 E. 151ST ST., OLATHE, KS 66062, ATTENTION: DEVON A. ROLF, Esq..

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this

Signature

Respectfully Submitted, Philip I. Straub, et al.

By their Representatives,

E.J. BROOKS & ASSOCIATES, PLLC

1221 Nicollet Avenue, Suite 500

Minneapolis MN 55403

Edward J. Brooks VI

Reg. No. 40,925

RECEIVED

APR 2 1 2003

GROUP 3600